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| APPLICATION NO.        | FILING DATE                         | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|-------------------------------------|----------------------|---------------------|------------------|
| 10/670,245             | 09/26/2003                          | Masaru Sugano        | 031198              | 8594             |
|                        | 7590 10/03/200<br>, HATTORI, DANIEL | EXAMINER             |                     |                  |
|                        | TICUT AVENUE, NV                    | ROBERTS, JESSICA M   |                     |                  |
| SUITE 700<br>WASHINGTO | N, DC 20036                         |                      | ART UNIT            | PAPER NUMBER     |
|                        |                                     |                      | 2621                |                  |
|                        |                                     |                      |                     |                  |
|                        |                                     |                      | MAIL DATE           | DELIVERY MODE    |
|                        |                                     |                      | 10/03/2008          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Advisory Action Before the Filing of an Appeal Brief

| Application No. | Applicant(s)  |  |  |
|-----------------|---------------|--|--|
| 10/670,245      | SUGANO ET AL. |  |  |
| Examiner        | Art Unit      |  |  |
| JESSICA ROBERTS | 2621          |  |  |

|   | JESSICA ROBERTS   | 2621  |   |
|---|---|---|---|
| The MAILING DATE of this communication appe   | ears on the cover sheet with the c  | correspondence add  | ress                                    |
| THE REPLY FILED <u>05 September 2008</u> FAILS TO PLACE THI   | S APPLICATION IN CONDITION F  | OR ALLOWANCE.   |   |
| 1. The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Application (RCE) in compliance with 37 Comperiods:   | the same day as filing a Notice of a<br>replies: (1) an amendment, affidavi<br>eal (with appeal fee) in compliance            | Appeal. To avoid abar<br>t, or other evidence, w<br>with 37 CFR 41.31; or | hich places the (3) a Request           |
| a) The period for reply expires <u>3</u> months from the mailing date   | of the final rejection.   |   |   |
| b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire I Examiner Note: If box 1 is checked, check either box (a) or MONTHS OF THE FINAL REJECTION. See MPEP 706.07(  | dvisory Action, or (2) the date set forth<br>ater than SIX MONTHS from the mailing<br>(b). ONLY CHECK BOX (b) WHEN THE<br>f). | g date of the final rejection<br>FIRST REPLY WAS FIL                      | n.<br>.ED WITHIN TWO                    |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of ex under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b) NOTICE OF APPEAL | tension and the corresponding amount of shortened statutory period for reply origing than three months after the mailing dat  | of the fee. The appropria<br>nally set in the final Offic                 | te extension fee<br>e action; or (2) as |
| <ol> <li>The Notice of Appeal was filed on A brief in comp<br/>filing the Notice of Appeal (37 CFR 41.37(a)), or any exte<br/>Notice of Appeal has been filed, any reply must be filed w</li> </ol>   | nsion thereof (37 CFR 41.37(e)), to   | avoid dismissal of the  |   |
| AMENDMENTS  |   |   |   |
| <ol> <li>The proposed amendment(s) filed after a final rejection,</li> <li>They raise new issues that would require further co</li> <li>They raise the issue of new matter (see NOTE below)</li> </ol>  | nsideration and/or search (see NOī<br>w);   | ΓE below);  |   |
| <ul><li>(c) They are not deemed to place the application in bef<br/>appeal; and/or</li></ul>  | ter form for appeal by materially rec   | ducing or simplifying th  | ne issues for                           |
| (d) ☐ They present additional claims without canceling a NOTE: (See 37 CFR 1.116 and 41.33(a)).   | corresponding number of finally reje  | ected claims.   |   |
| 4. The amendments are not in compliance with 37 CFR 1.1.  | 21. See attached Notice of Non-Co   | mpliant Amendment (F  | PTOL-324).                              |
| 5. Applicant's reply has overcome the following rejection(s)  |   |   | ,                                       |
| <ol> <li>Newly proposed or amended claim(s) would be al<br/>non-allowable claim(s).</li> </ol>  |   |   |   |
| 7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is protected. The status of the claim(s) is (or will be) as follows:   |   | I be entered and an ex  | xplanation of                           |
| Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: <u>1-22</u> .  |   |   |   |
| Claim(s) withdrawn from consideration:  |   |   |   |
| AFFIDAVIT OR OTHER EVIDENCE   | 4 la -6 4 la N la   |   | le e t                                  |
| <ol> <li>The affidavit or other evidence filed after a final action, bu<br/>because applicant failed to provide a showing of good and<br/>was not earlier presented. See 37 CFR 1.116(e).</li> </ol>  |   |   |   |
| <ol> <li>The affidavit or other evidence filed after the date of filing<br/>entered because the affidavit or other evidence failed to of<br/>showing a good and sufficient reasons why it is necessary</li> </ol>   | overcome <u>all</u> rejections under appear<br>y and was not earlier presented. Se  | al and/or appellant fails<br>see 37 CFR 41.33(d)(1)                       | s to provide a                          |
| 10. The affidavit or other evidence is entered. An explanatio   | n of the status of the claims after er  | ntry is below or attache  | ed.                                     |
| REQUEST FOR RECONSIDERATION/OTHER  11. ☐ The request for reconsideration has been considered bu   | t does NOT place the application in   | condition for allowand  | ce because:                             |
| <ul> <li>12. ☐ Note the attached Information <i>Disclosure Statement</i>(s).</li> <li>13. ☐ Other: see continuation sheet.</li> </ul>   | (PTO/SB/08) Paper No(s)   |   |   |
| /Marsha D. Banks-Harold/<br>Supervisory Patent Examiner, Art Unit 2621  |   |   |   |
|   |   |   |   |

As to applicant's request to withdraw finality of office action because independent claim 21 has not been amended during the prosecution, and has now been rejected over a new ground of rejection.

The examiner respectfully disagrees. The record is clear that the relied upon references used for the rejection of Claim 21 were Chakraborty et al., US-7,110,454 and Gonsalves et al., US-6,392,710.

As to applicant's argument that Chakraborty et al. does not disclose or suggest "a shot segmentation device [that segments] the video into respective shots" and, after the video has been segmented into shots, "a calculator [calculates] shot density DS of the video for said respective shots" and "a calculator [calculates] motion intensity of the respective shots"; and a "dynamic/static scene classifier [classifies] the respective shots into a dynamic scene with much motions or a static scene with little motions based on the shot density and the motion intensity [of the respective shots]."

Applicant is arguing newly amended claim limitations. Since the new limitations were not previously presented, the newly amended claim limitations would required additional searching and further consideration.

As to applicant's argument regarding Chakraborty et al. does not disclose or suggest that the "slow scene" is detected based on motion intensity of the target shot and the similar shot.

The examiner respectfully disagrees. Chakraborty discloses examining frame-to-frame intensity changes as the pixel level (column 1 line 53-54); pixel activity would indicative of motion. Chakraborty teaches an integrated process for segmenting video shots by successfully identifying scene changes, both abrupt and gradual. A combination of a plurality of difference metrics are processed in an integrated fashion to identify and verify both gradual and abrupt scene changes in the video (column 4 line 66 to column 5 line 5). Further, Chakraborty discloses a predefined shot duration (column 13 line 15 to 35); which is equivalent to the shot density. Since Chakraborty discloses to examine the frames at a pixel level, and segmenting the video into both gradual and abrupt scenes, and the shot duration is used with detecting the abrupt scene (column 13 line 13-35), it is clear to the examiner that Chakraborty segments the video into abrupt or gradual scene based on motion, which reads upon the claimed limitation.

As to applicant's argument regarding Chakraborty is silent with respect to detecting motion direction using the interframe difference metrics.

The examiner respectfully disagrees. Chakraborty discloses where the interframe and histogram difference metrics are used to identify abrupt scene changes and the interframe variance difference metric is used to identify gradual scene changes (see abstract). Chakraborty also discloses the camera might remain fixed or it might undergo one the characteristics directional motion, i.e., panning (column 1line 45-46). Since Chakraborty discloses to use the interframe difference metric to identify abrupt and gradual scene changes, and it is known in the art to produce a motion vector by taking the difference of two frames, it is clear to the examiner, that the produced motion vector would include also include direction of motion, if the camera undergoes directional motion.

As to applicants argument regarding the various metrics of Chakraborty et al. do not disclose or suggest " a detector for detecting a histogram relating to motion directions of the respective shots" because the shots are not segmented when the various metrics are applied to the frames of the video.

The examiner respectfully disagrees. Chakraborty discloses the camera might remain fixed or it might undergo one the characteristics directional motion, i.e., panning (column 1 line 45-46). Panning would include the direction of the motion from the camera.

As to applicant argument regarding "shot duration" and "scene change duration" are not the same as "shot density".

The examiner respectfully disagrees. Chakraborty discloses since abrupt changes are defined primarily by the interframe difference and the histogram difference, these two metrics are used to determine the dominant cut. The dominant cut may be determined based on the amount that the computed metrics exceed their respectful threshold. This process (steps 215 and 216) is repeated until all of the identified abrupt scene changes meet the minimum shot duration threshold. Since Chakraborty, discloses the abrupt scene changes are defined by the interframe difference, histogram difference and the shot duration, it is clear to the examiner that shot duration as disclosed by Chakraborty reads upon shot density, as it is used to identify the abrupt scene changes which would be indicative of motion.

As to applicant's argument regarding the examiner has not pointed out where Chakraborty et al. explicitly, implicitly, or inherently discloses "a commercial scene detector for detecting a commercial scene by comparing a number of shot boundaries detected during a predetermined interval with a predetermined reference number."

The examiner respectfully disagrees Chakraborty discloses video in education and commerce, column 1 line 16-18. As defined by Merriam-Webster Dictionary, a commercial has to do with commerce. Further, the intensity range of a given frame is divided into a number of predefined bins, with each bin corresponding to an intensity range. Next, the number of pixel in each bin counted to generate the corresponding distribution comprising the histogram, column 8 line 51-55.

As to applicants argument regarding Gonsalves does not teach inserting a different type of video transition effect according to whether the highlight scenes to be combined are a dynamic scene or a static scene.

The examiner respectfully disagrees. Chakraborty discloses a transition between two shots is made in a gradual manner using special editing machines to achieve a visually pleasing effect. These types of gradual changes are also called "optical cuts". There are several types of optical cuts, such as "fade in", "fade out', "dissolve", "wipe", "flips", "superimpose", "blow-ups", "move-ins", etc. column 1 line 55-61. Gonsalves teaches a non-linear video editing system, with the capacity to display and modify video frame on a field-by field basis, has the capacity to implement special effects on a field-by field basis, thus increasing the accuracy of the effect, column 3 line 10-13. Since Gonsalves discloses to implement special effects on a field by field basis, it is clear to the examiner, that Gonsalves would be fully capable of inserting different effects based on the type of scenes, which reads upon the claimed limitation.